

CLAIMS

What is claimed is:

1. An air cleaning apparatus, comprising:
 - a cabinet provided with first and second air cleaning units, said first and second air cleaning units being connected to each other and each being provided with a blowing unit and a filtering unit;
 - first and second sensors provided on the cabinet to be spaced apart from each other and to sense air pollution levels at opposite sides of a room;
 - a control unit to control the first and second air cleaning units so that both the first and second air cleaning units are operated, or either of the first and second air cleaning units is operated, according to data obtained from the first and second sensors.
2. The air cleaning apparatus according to claim 1, wherein said air cleaning units each are provided with an air inlet port and an air outlet port so that air is circulated through the air cleaning units, said blowing unit is installed in each of the air cleaning units, and said filtering unit is removably mounted to the air inlet port of each of the air cleaning units.
3. The air cleaning apparatus according to claim 2, wherein said blowing unit comprises:
 - a blowing fan installed in each of the air cleaning units; and
 - a motor installed in each of the air cleaning units to rotate the blowing fan.
4. The air cleaning apparatus according to claim 3, wherein said motor comprises:
 - a variable speed motor which is controllable via a rotating speed thereof.
5. The air cleaning apparatus according to claim 2, wherein said filtering unit comprises:
 - a filter casing provided with an air sucking grill and removably mounted to the air inlet port of each of the air cleaning units; and
 - at least one filter installed in the filter casing and removably mounted to the filter casing.
6. The air cleaning apparatus according to claim 5, wherein said filter, installed in the filter casing, comprises:

an antibacterial free filter, an electrostatic dust filter, and a fine dust filter which are arranged to be superposed.

7. The air cleaning apparatus according to claim 1, further comprising:
a control panel mounted to a predetermined portion of the cabinet, said control panel being provided with a plurality of control buttons to control an operation of the air cleaning apparatus and a display to display an operating state of the air cleaning apparatus.

8. The air cleaning apparatus according to claim 1, wherein said first and second air cleaning units are provided at upper and lower portions of the cabinet, respectively, and said first and second sensors are mounted to the upper and lower portions of the cabinet, respectively.

9. The air cleaning apparatus according to claim 1, wherein said first and second air cleaning units are provided at both sides of the cabinet, and said first and second sensors are mounted to both ends of the cabinet.

10. The air cleaning apparatus according to claim 1, further comprising:
a disc-shaped support base provided on a bottom of the cabinet to support the cabinet, and having an outer diameter larger than an outer diameter of the cabinet.

11. The air cleaning apparatus according to claim 3, wherein the motor installed in each of the air cleaning units control an operation of the air cleaning units, so that the blowing fan of the first cleaning unit is operated at a speed higher than the blowing fan of the second cleaning unit, or so that the blowing fan of the second cleaning unit is operated at a speed higher than the blowing fan of the first cleaning unit.

12. The air cleaning apparatus according to claim 6, wherein the filter casing comprises:
filter support walls to support the antibacterial free filter, the electrostatic dust filter, and the fine dust filter.

13. An air cleaning apparatus, comprising:
a plurality of air cleaning units connected to each other;

a sensing unit to sense room air pollution levels; and
a control unit to control the air cleaning units simultaneously or individually based on the sensed room air pollution levels.

14. An air cleaning apparatus, comprising:
a plurality of air cleaning units connected to each other and provided with a blowing unit and a filtering unit;
a plurality of sensors to sense room air pollution levels; and
a control unit to control the air cleaning units simultaneously or individually based on data of the sensed room air pollution levels obtained by the sensors.

15. The air cleaning apparatus according to claim 14, wherein said blowing unit comprises:
a blowing fan installed in each of the air cleaning units; and
a motor installed in each of the air cleaning units to rotate the blowing fan.

16. The air cleaning apparatus according to claim 15, wherein said motor comprises:
a variable speed motor which is controllable via a rotating speed thereof.

17. The air cleaning apparatus according to claim 14, wherein said filtering unit comprises:
a filter casing removably mounted to each of the air cleaning units; and
a plurality of filters installed in the filter casing and arranged to be superimposed.